IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claim 1, without prejudice or disclaimer, and AMEND claims 2, 3, and 6-14 in accordance with the following:

1. CANCELLED

2. (CURRENTLY AMENDED) The word recognizing apparatus according to claim ~~1~~7, wherein said collating unit includes a memory storing the feature amount of the candidate word, and releases the memory when a collation of the feature amount of the candidate word is completed.

3. (CURRENTLY AMENDED) A word recognizing apparatus, comprising:

a listing unit storing a list of a candidate word comprising a plurality of characters;

a dictionary unit storing feature amounts of the plurality of characters;

an extracting unit extracting the feature amount from a recognition target by a process in which the recognition target is not required to be divided into units even if the recognition target comprises a plurality of units;

a generating unit referring to the list of the candidate word stored in said listing unit, and dynamically generating the feature amount of only the candidate word registered in the list by a composition operation using the feature amounts of the plurality of characters stored in said dictionary unit during a recognition process for the recognition target, wherein the feature amount of only the candidate word and the plurality of characters and the composition operation are determined such that the feature amount of only the candidate word dynamically generated by the composition operation matches the feature amount extracted from the recognition target by said extracting unit;

a collating unit collating the dynamically generated feature amount of only the candidate word with the feature amount extracted from the recognition target, and outputting a recognition result;~~The word recognizing apparatus according to claim 1, further comprising:~~

an inputting unit inputting an image as the recognition target; and

an extracting unit performing a one-dimensional gradating conversion in a direction perpendicular to a connecting direction of characters for a direction code histogram of a contour line in each of a plurality of small areas in an inputted image provided that no gradating conversion is performed in the connecting direction of the characters, and extracting a direction code histogram series obtained from a conversion result as the feature amount of the recognition target.

4. (PREVIOUSLY PRESENTED) The word recognizing apparatus according to claim 3, wherein said extracting unit divides a length of the inputted image in the direction perpendicular to the connection direction of characters by a predetermined integer and divides the image into the small areas with an obtained quotient as a size of each of the small areas.

5. CANCELLED

6. (CURRENTLY AMENDED) The word recognizing apparatus according to claim ~~1~~7, wherein said generating unit generates a new direction code histogram series by arranging a plurality of direction code histogram series corresponding to the feature amounts of characters composing the candidate word and designates a generated direction code histogram series as the feature amount of the candidate word.

7. (CURRENTLY AMENDED) A word recognizing apparatus, comprising:

a listing unit storing a list of a candidate word comprising a plurality of characters;

a dictionary unit storing feature amounts of the plurality of characters;

an extracting unit extracting the feature amount from a recognition target by a process in which the recognition target is not required to be divided into units even if the recognition target comprises a plurality of units;

a generating unit referring to the list of the candidate word stored in said listing unit, and dynamically generating the feature amount of only the candidate word registered in the list by a composition operation using the feature amounts of the plurality of characters stored in said dictionary unit during a recognition process for the recognition target, wherein the feature amount of only the candidate word and the plurality of characters and the composition operation are determined such that the feature amount of only the candidate word dynamically generated

by the composition operation matches the feature amount extracted from the recognition target by said extracting unit; and

a collating unit collating the dynamically generated feature amount of only the candidate word with the feature amount extracted from the recognition target, outputting a recognition result, ~~The word recognizing apparatus acc~~ording ~~to claim 1, wherein said collating unit performs~~performing a non-linear matching of the feature amount of the candidate word and the feature amount of the recognition target such that a shift of the recognition target in a connection direction of characters is absorbed, and ~~calculates~~ calculating a degree of similarity between the feature amount of the candidate word and the feature amount of the recognition target.

8. (CURRENTLY AMENDED) The word recognizing apparatus according to claim ~~1~~7, wherein said listing unit stores a plurality of lists of candidate words, and wherein said generating unit selects a list which has a high possibility of containing a word corresponding to the recognition target from among the plurality of lists according to a previous recognition result and refers to the selected list.

9. (CURRENTLY AMENDED) A word recognizing apparatus, comprising:

a listing unit storing a list of a candidate word comprising a plurality of characters;

an extracting unit extracting a feature amount from a recognition target by a process in which a recognition target is not required to be divided into units even if the recognition target comprises a plurality of units;

a generating unit referring to a list of a recognition candidate word, and dynamically generating the feature amount of only the recognition candidate word registered in the list by a composition operation using feature amounts of the plurality of characters during a recognition process for the recognition target, the feature amounts of the candidate word and the plurality of characters and the composition operation determined such that the feature amount of only the recognition candidate word generated by the composition operation matches the feature amount extracted from the recognition target by said extracting unit; and

a collating unit collating the generated feature amount of only the recognition candidate word with the feature amount extracted from the recognition target, ~~and~~ outputting a recognition result, performing a non-linear matching of the feature amount of the candidate word and the feature amount of the recognition target such that a shift of the recognition target in a connection direction of characters is absorbed, and calculating a degree of similarity between the feature

amount of the candidate word and the feature amount of the recognition target.

10. (CURRENTLY AMENDED) A recognizing apparatus, comprising:

a listing unit storing a list of a candidate word comprising a plurality of characters;

an extracting unit extracting a feature amount from a recognition target by a process in which the recognition target is not required to be divided into units even if the recognition target comprises a plurality of units;

a generating unit referring to a list of a recognition candidate pattern string, and dynamically generating the feature amount of only the recognition candidate pattern string registered in the list by a composition operation using feature amounts of patterns during a recognition process for the recognition target, wherein the feature amounts of the candidate word and the plurality of characters and the composition operation are determined such that the feature amount of only ~~the~~ a recognition candidate word generated by the composition operation matches the feature amount extracted from the recognition target by said extracting unit; and

a collating unit collating the generated feature amount of the recognition candidate pattern string with the feature amount extracted from the recognition target, ~~and~~ outputting a recognition result, performing a non-linear matching of the feature amount of the candidate word and the feature amount of the recognition target such that a shift of the recognition target in a connection direction of characters is absorbed, and calculating a degree of similarity between the feature amount of the candidate word and the feature amount of the recognition target.

11. (CURRENTLY AMENDED) A computer-readable storage medium on which is recorded a program causing a computer to execute a process, said process comprising:

storing a list of a candidate word comprising a plurality of characters;

extracting a feature amount from a recognition target by a process in which the recognition target is not required to be divided into units even if the recognition target comprises a plurality of units;

dynamically generating, by referring to a list of a recognition candidate word, the feature amount of only the recognition candidate word registered in the list by a composition operation using feature amounts of the plurality of characters during a recognition process for the recognition target, wherein the feature amounts of the candidate word and the plurality of characters and the composition operation are determined such that the feature amount of the recognition candidate word dynamically generated by the composition operation matches the

feature amount extracted from the recognition target by said extracting; ~~and~~

collating the generated feature amount of the recognition candidate word with the feature amount extracted from the recognition target;

performing a non-linear matching of the feature amount of the candidate word and the feature amount of the recognition target such that a shift of the recognition target in a connection direction of characters is absorbed; and

calculating a degree of similarity between the feature amount of the candidate word and the feature amount of the recognition target.

12. (CURRENTLY AMENDED) A computer-readable storage medium on which is recorded a program causing a computer to execute a process, said process comprising:

storing a list of a candidate word comprising a plurality of characters;

extracting a feature amount from a recognition target by a process in which the recognition target is not required to be divided into units even if the recognition target comprises a plurality of units;

dynamically generating, by referring to a list of a recognition candidate pattern string, the feature amount of only the recognition candidate pattern string registered in the list by a composition operation using feature amounts of patterns during a recognition process for the recognition target, wherein the feature amounts of the candidate word and the plurality of characters and the composition operation are determined such that the feature amount of only ~~the~~ a recognition candidate word generated by the composition operation matches the feature amount extracted from the recognition target by said extracting; ~~and~~

collating the generated feature amount of the recognition candidate pattern string with the feature amount extracted from the recognition target;

performing a non-linear matching of the feature amount of the candidate word and the feature amount of the recognition target such that a shift of the recognition target in a connection direction of characters is absorbed; and

calculating a degree of similarity between the feature amount of the candidate word and the feature amount of the recognition target.

13. (CURRENTLY AMENDED) A recognizing method, comprising:

generating a list of a candidate pattern string comprising a plurality of characters;

generating a dictionary storing feature amounts of a plurality of patterns;

extracting the feature amount from a recognition target by a process in which the recognition target is not required to be divided into units even if the recognition target comprises a plurality of units;

dynamically generating, by referring to the list of the candidate pattern string, the feature amount of only the candidate pattern string registered in said list by a composition operation using the feature amounts of patterns stored in said dictionary during a recognition process for the recognition target, wherein ~~the feature amounts of the candidate pattern string and~~ the plurality of characters and the composition operation and the feature amount of the candidate pattern are determined such that the feature amount of only the candidate pattern string generated by the composition operation matches a feature amount extracted from the recognition target by said extracting; ~~and~~

collating the generated feature amount of the candidate pattern string with the feature amount extracted from the recognition target;

performing a non-linear matching of the feature amount of the candidate pattern string and the feature amount of the recognition target such that a shift of the recognition target in a connection direction of characters is absorbed; and

calculating a degree of similarity between the feature amount of the candidate pattern string and the feature amount of the recognition target.

14. (CURRENTLY AMENDED) A word recognizing apparatus, comprising:

a listing unit storing a list of a candidate word;

a dictionary unit storing feature amounts of a plurality of characters;

an extracting unit dividing a recognition target in units of meshes and extracting the feature amount from the divided recognition target, wherein a number of the meshes changes according to a length of the recognition target when the recognition target comprises the plurality of characters, ;

a generating unit referring to the list of the candidate word stored in said listing unit, and dynamically generating the feature amount of only the candidate word registered in the list by a composition operation using the feature amounts of the plurality of characters stored in said dictionary unit during a recognition process for the recognition target, wherein the feature amounts of the candidate word and the plurality of characters and the composition operation determined such that the feature amount of the candidate word generated by the composition operation matches the feature amount extracted from the candidate word by said extracting unit;

and

a collating unit collating the generated feature amount of the candidate word with the feature amount extracted from the recognition target, ~~and~~ outputting a recognition result, performing a non-linear matching of the feature amount of the candidate word and the feature amount of the recognition target such that a shift of the recognition target in a connection direction of characters is absorbed, and calculating a degree of similarity between the feature amount of the candidate word and the feature amount of the recognition target.